SYLVANIA

engineering data service

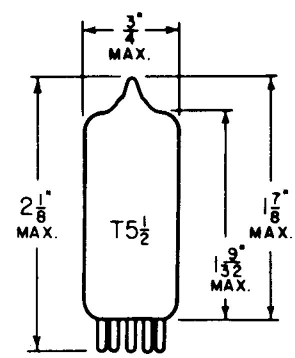
SYLVANIA
5844

QUICK REFERENCE DATA

Miniature, medium mu twin triode designed for use in moderately high-speed electronic computers. (See Application.)

MECHANICAL DATA

Bulb	T-5½
Base	E7-1, Miniature Button 7-Pin
Basing	7BF
Cathode	Coated Unipotential
Mounting Position	Any



ELECTRICAL DATA

HEATER CHARACTERISTICS

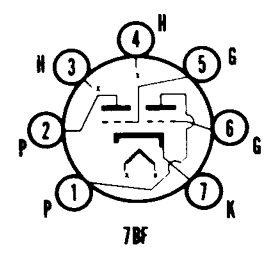
Heater Voltage	6.3 Volts	
Heater Current	300 Ma	
Heater-Cathode Voltage		
Heater Positive with Respect to Cathode		
DC Component	90 Volts	Max.
Total DC and Peak	180 Volts	Max.
Heater Negative with Respect to Cathode		
Total DC and Peak	180 Volts	Max.

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid to Plate (Each Section)	2.7 μμf
Input (Each Section)	2.4 μμf
Output (Section 1)[1]	0.5 μμf
Output (Section 2)[1]	0.4 μμf
Plate to Plate	0.8 μμf

RATINGS (Design Center Values — Each Section)

Plate Voltage	175 Volts	Max.
Plate Dissipation	0.5 Watts	Max.
Cathode Current	9.0 Ma	Max.
Positive DC Grid Voltage	0 Volts	Max.
Grid Circuit Resistance		
Fixed Bias	.05 Megohm	Max.
Cathode Bias	0.1 Megohm	Max.



CHARACTERISTICS AND TYPICAL OPERATION (Each Section)

Average Characteristics

Plate Voltage	100 Volts
Cathode Bias Resistor	470 Ohms
Plate Current	4.8 Ma
Amplification Factor	27
Transconductance	3400 μmhos
Plate Resistance (approx.)	7950 Ohms

Computer Service	On Condition	Off Condition
Plate Supply Voltage	150	150 Volts
Grid Voltage	0	−10 Volts
Plate Current (Minimum)		0.10 Ma
Plate Current (Maximum)	4.8	Ma
Grid Resistor	47,000	47,000 Ohms
Plate Load Resistor	20,000	20,000 Ohms

SYLVANIA ELECTRIC PRODUCTS INC.

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NOTE:

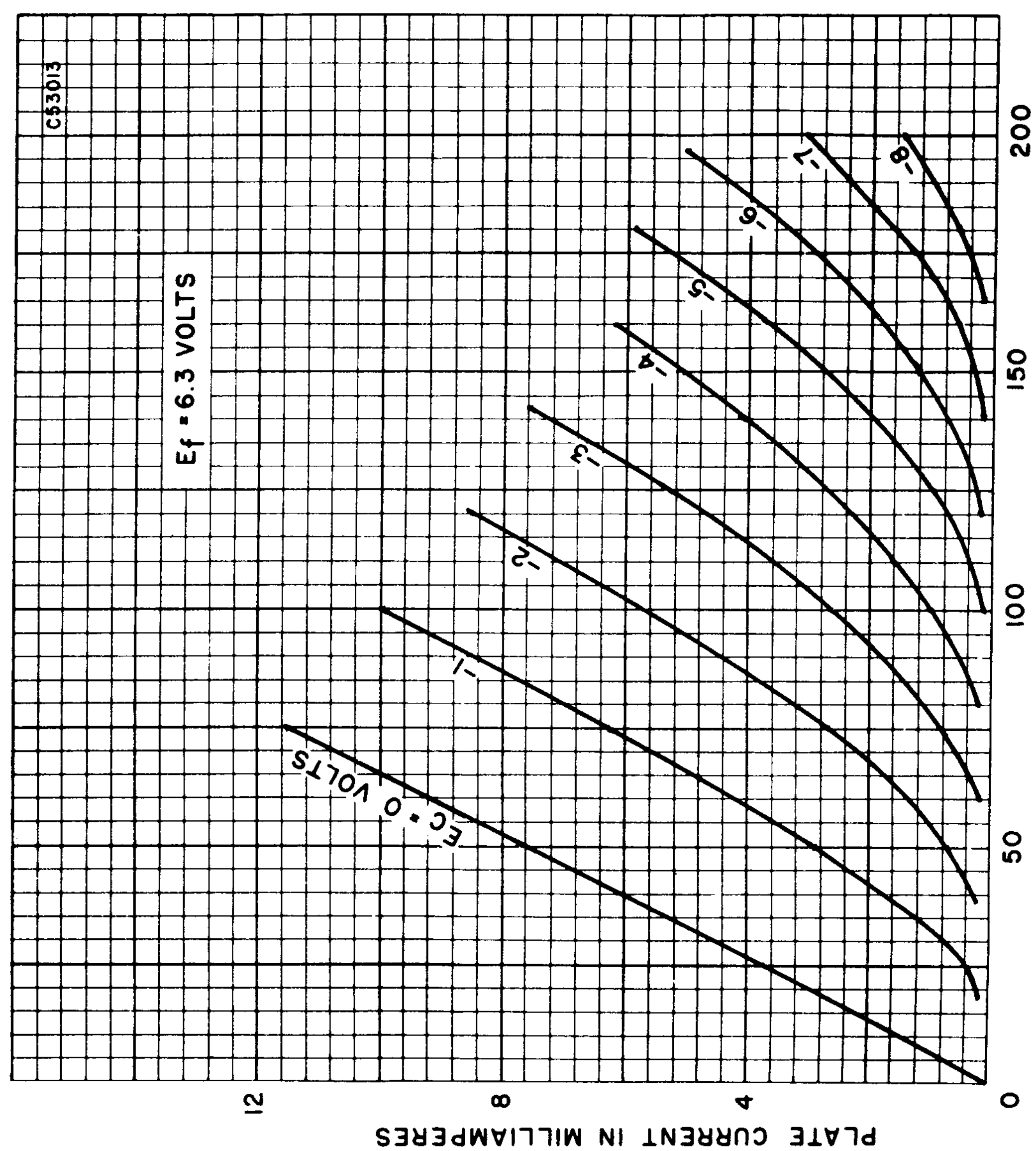
1. Section 1 connects to pins 2 and 5. Section 2 connects to pins 1 and 6.

APPLICATION

Sylvania type 5844 features relatively high zero-bias plate current and sharp. cutoff, heater cathode construction designed for dependable service under conditions of intermittent operation, and a cathode constructed to maintain its emission capabilities after long periods of operation under cutoff conditions.

The grid voltage required to produce 100 microamperes in one section must not differ by more than 1.0 volt from the grid voltage required to produce 100 microamperes in the other section with a plate supply voltage of 150 volts and a plate load resistor of 20,000 ohms.

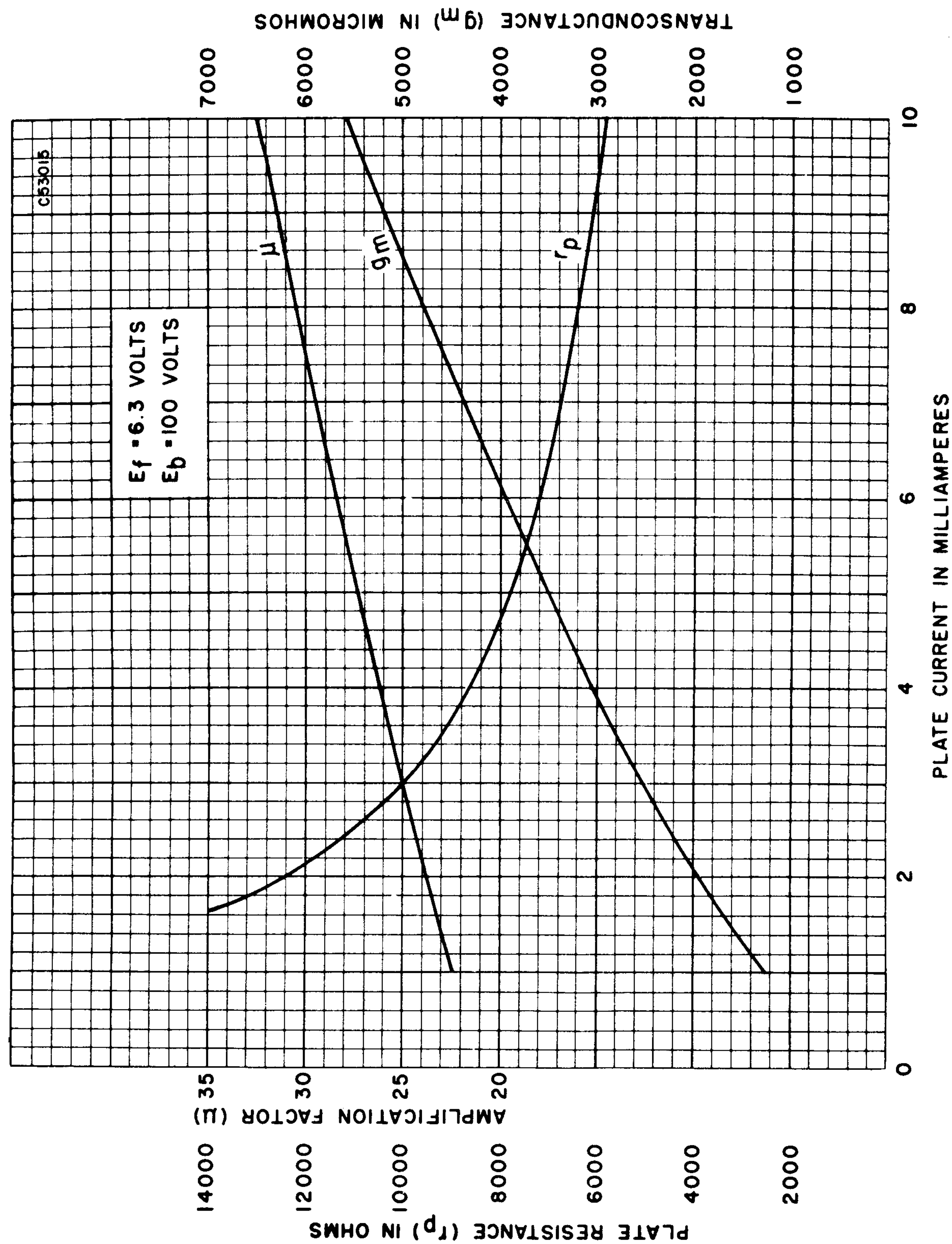
AVERAGE PLATE CHARACTERISTICS



SYLVANIA

5844

AVERAGE TRANSFER CHARACTERISTICS



AVERAGE CHARACTERISTICS

